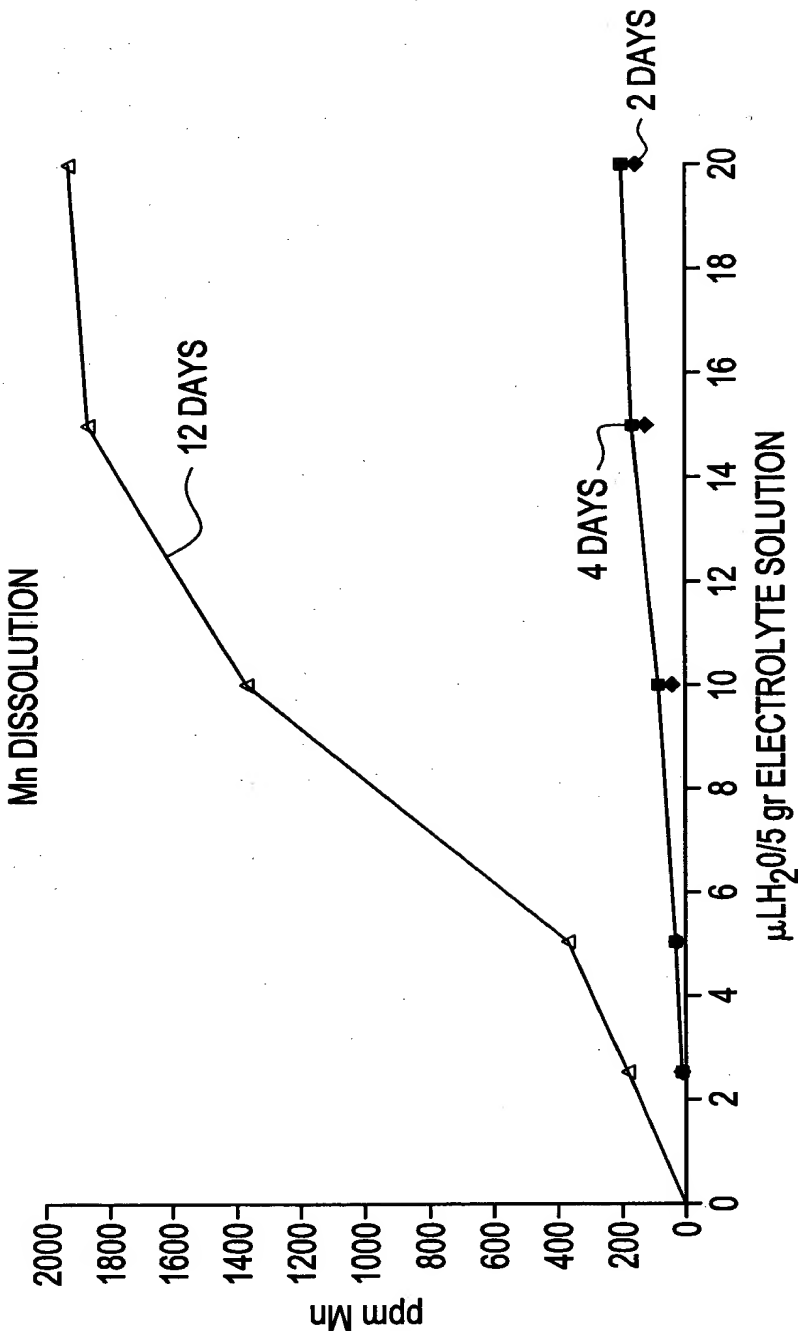


FIG. 1

THE WATER CORRELATION

- EXP. 1. ADDITION OF 0, 2.5, 5, 10, 15 AND 20 μ L OF H₂O
2. BACKGROUND:LMO IN ELECTROLYTE (RESIDUAL WATER)
3. BLANK:LMO IN ELECTROLYTE WITH Li₂CO₃

- A. DIRECT CORRELATION (2ND DAY, Mn²⁺ vs AMOUNT OF WATER ADDED
B. TIME EFFECT (2ND, 4TH AND 12TH DAY AFTER INITIATION



2/10

FIG. 2

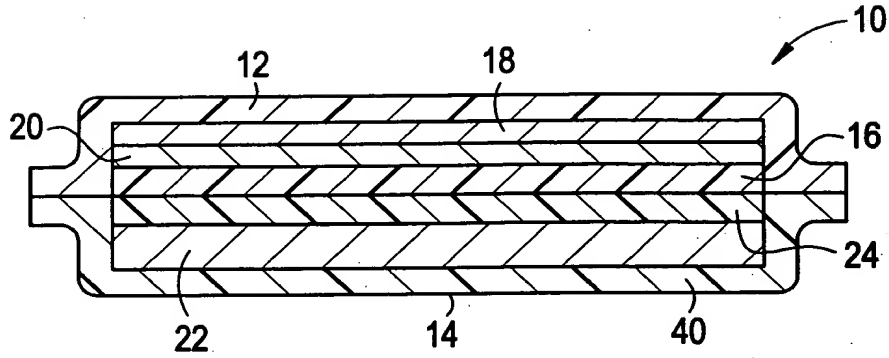
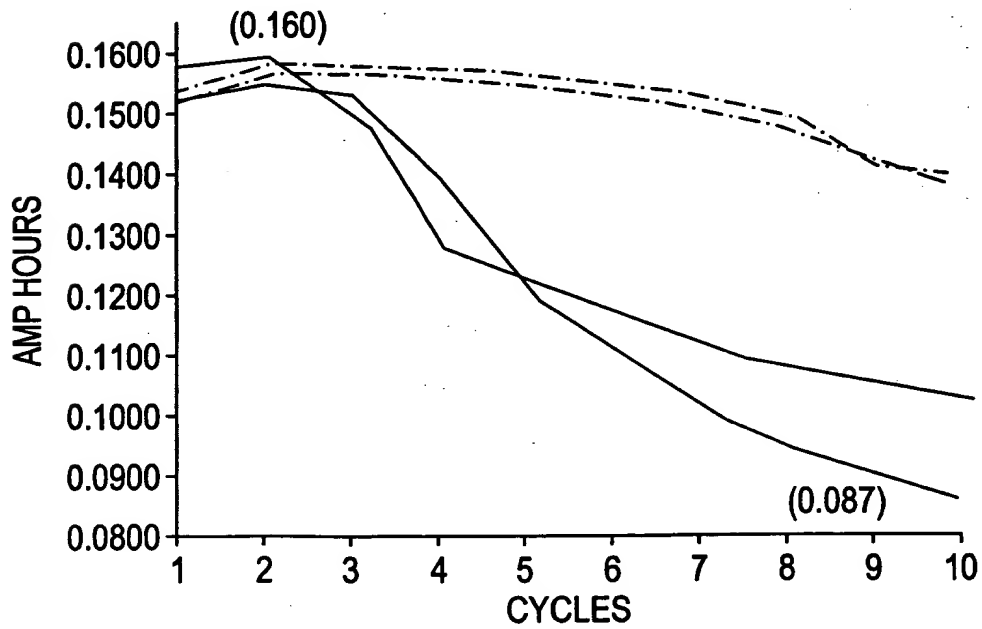


FIG. 3

LMO CELLS WITH & WITHOUT Li_2CO_3 CYCLED @ 60°C
DISCHARGE CAPACITY vs CYCLES PROFILE:
(CYCLES 1 TO 10)



3/10

FIG. 4

CELL VOLTAGE vs CAPACITY, CONSTANT CURRENT CYCLING.
BG35 / Li EC / DMC + 10% TRIBUTYLAMINE

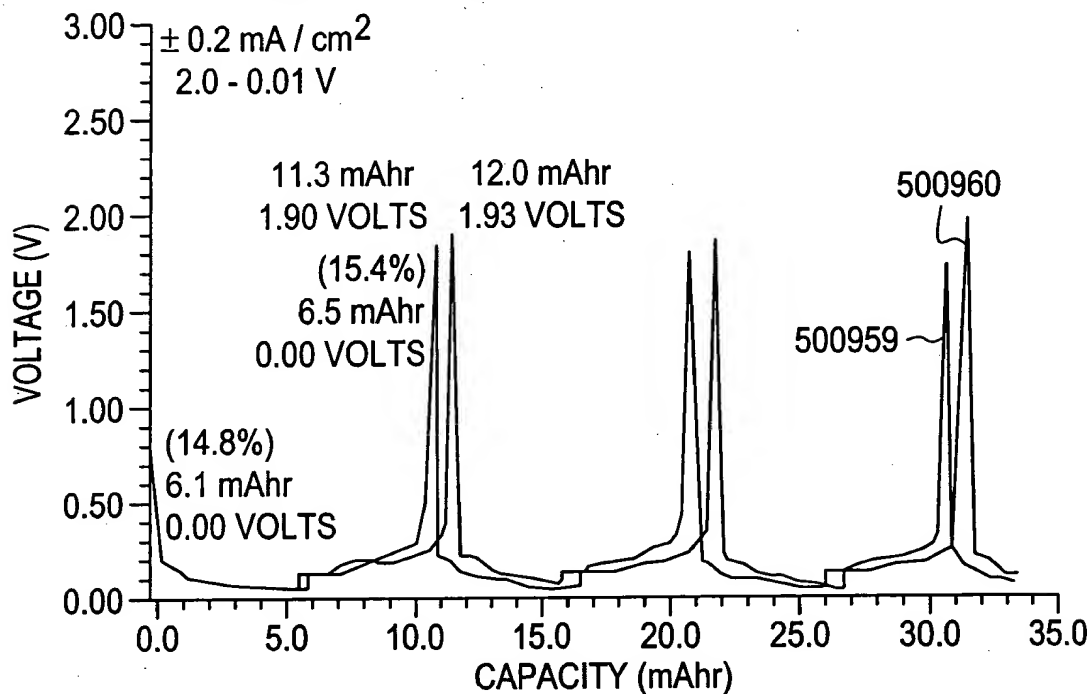
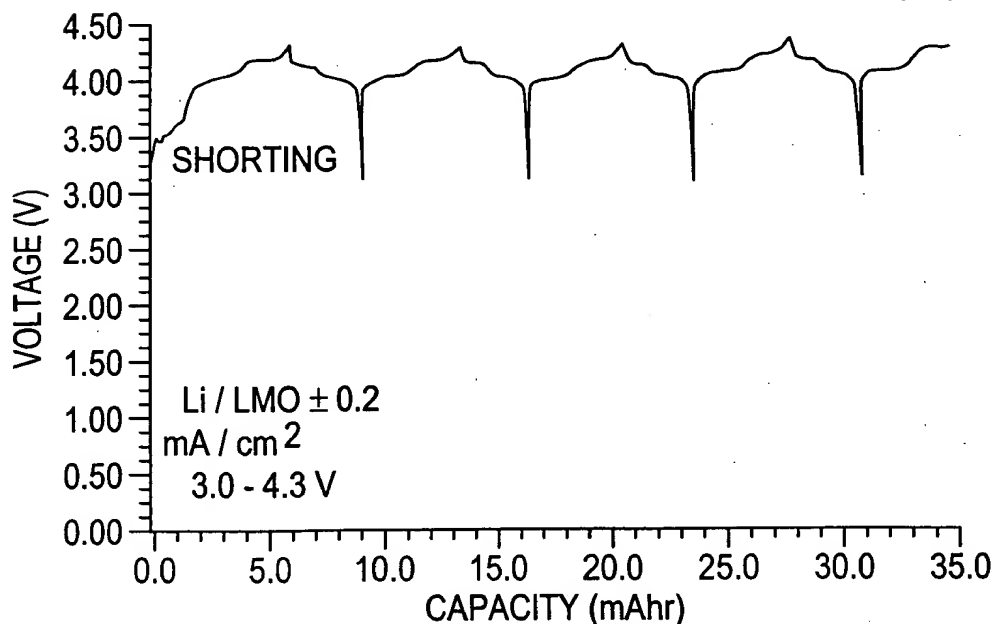


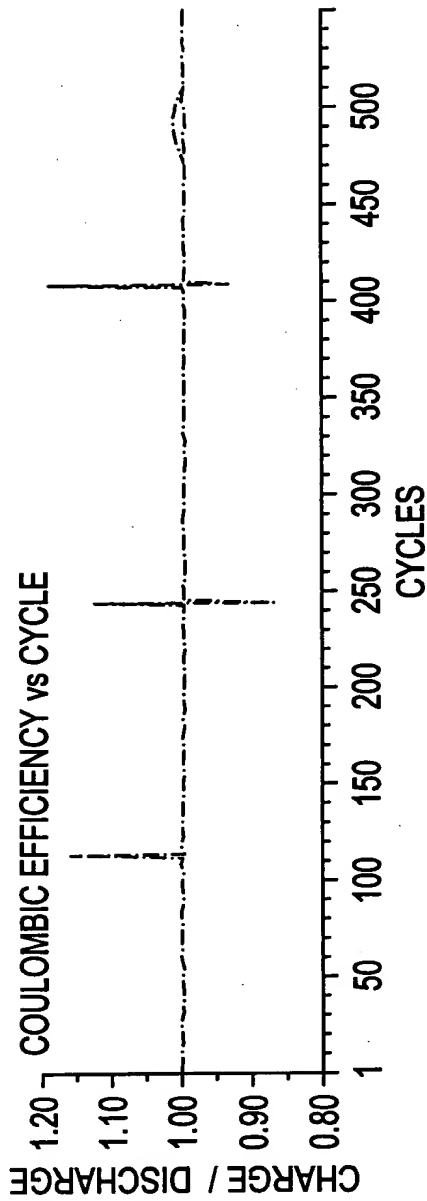
FIG. 5

CELL VOLTAGE vs CAPACITY, CONSTANT CURRENT CYCLING.
Li / LMO / EC / DMC LiPF₆ + 10% TRIBUTYLAMINE (TB)

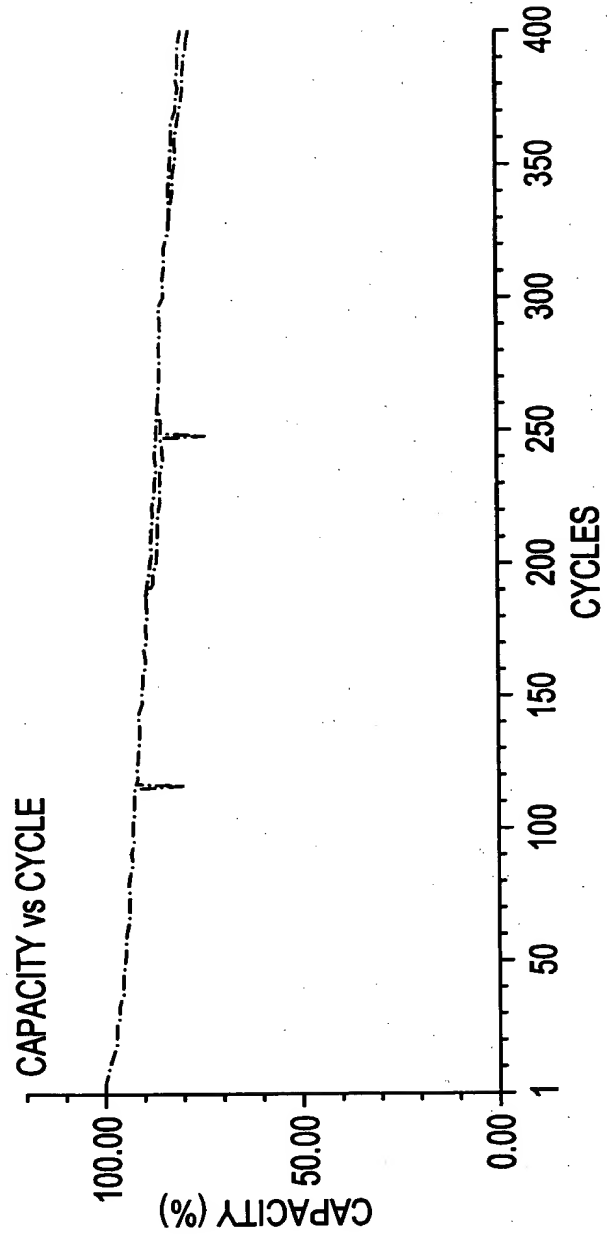


4/10

CYCLING OF SURFACE MODIFIED LMO CELLS @ 23C DISCHARGE = C / 2 CHARGE = C / 5



CYCLING OF SURFACE MODIFIED LMO CELLS @ 23C DISCHARGE = C / 2 CHARGE = C / 5



5/10

LiMn204 w / dec. 0.5%Na2CO3 vs. MCMB2528 23 AND 60°C

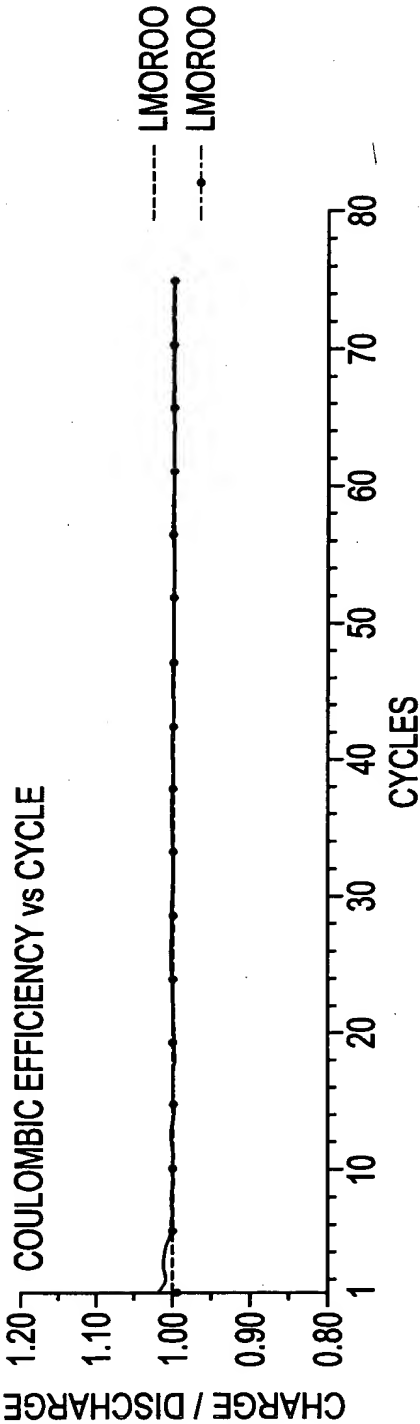


FIG. 6C

LiMn204 w / dec. 0.5%Na2CO3 vs. MCMB2528 23 AND 60°C

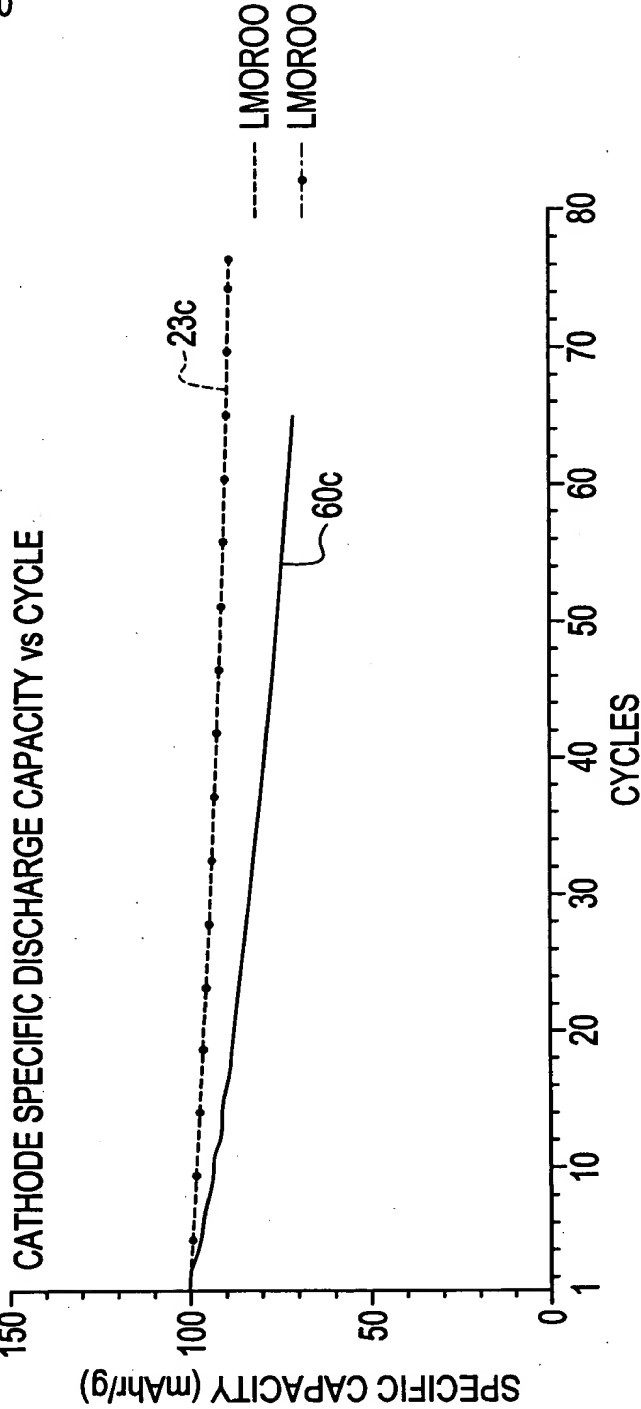


FIG. 6D

6/10

GRAPHITE / LMO: CELLS CYCLED AT 60°C DISCHARGE = C / 2: CHARGE = C / 5

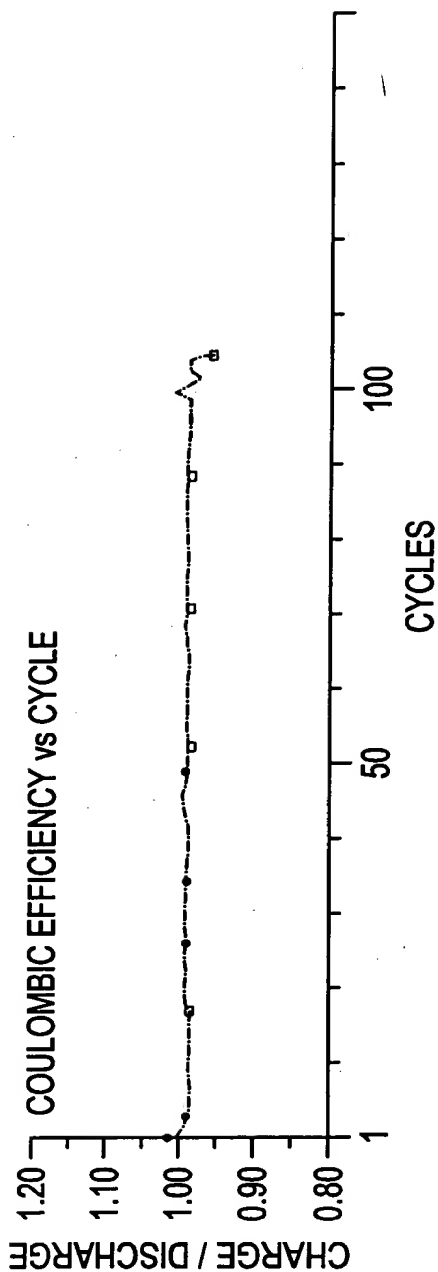


FIG. 7A

GRAPHITE / LMO: CELLS CYCLED AT 60°C DISCHARGE = C / 2: CHARGE = C / 5

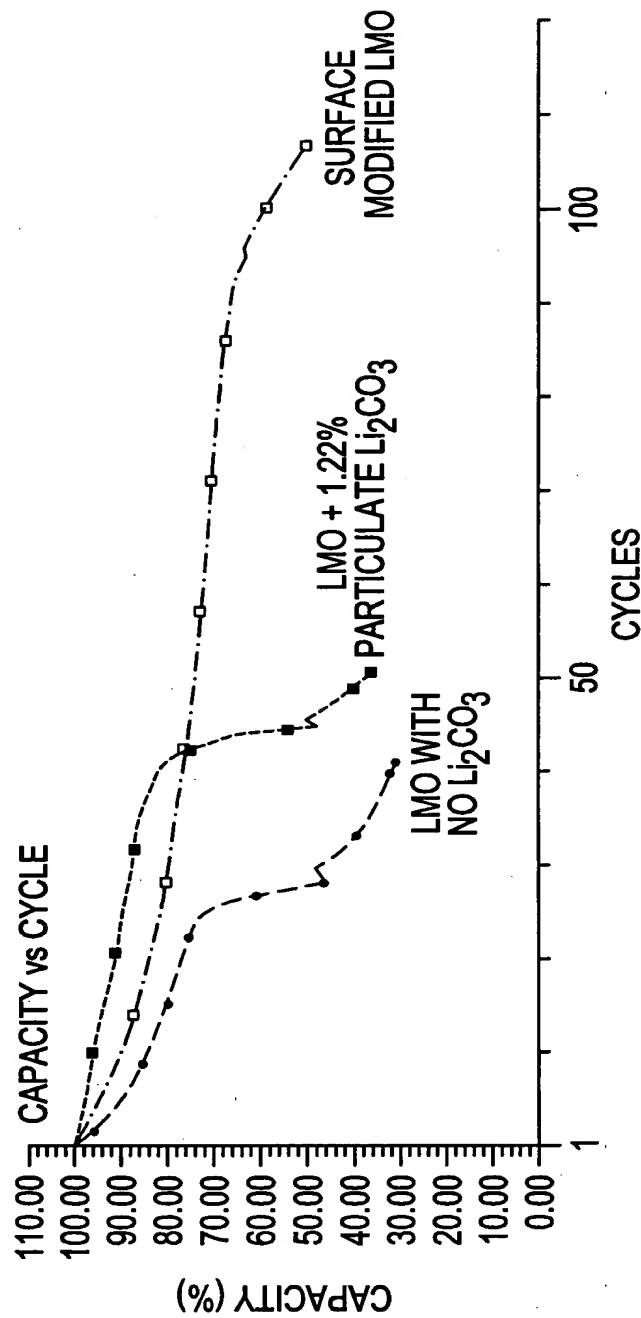


FIG. 7B

7/10

FIG. 8

GRAPHITE / LiMn_2O_4 IMPEDANCE VARIATION DURING 60°C STORAGE

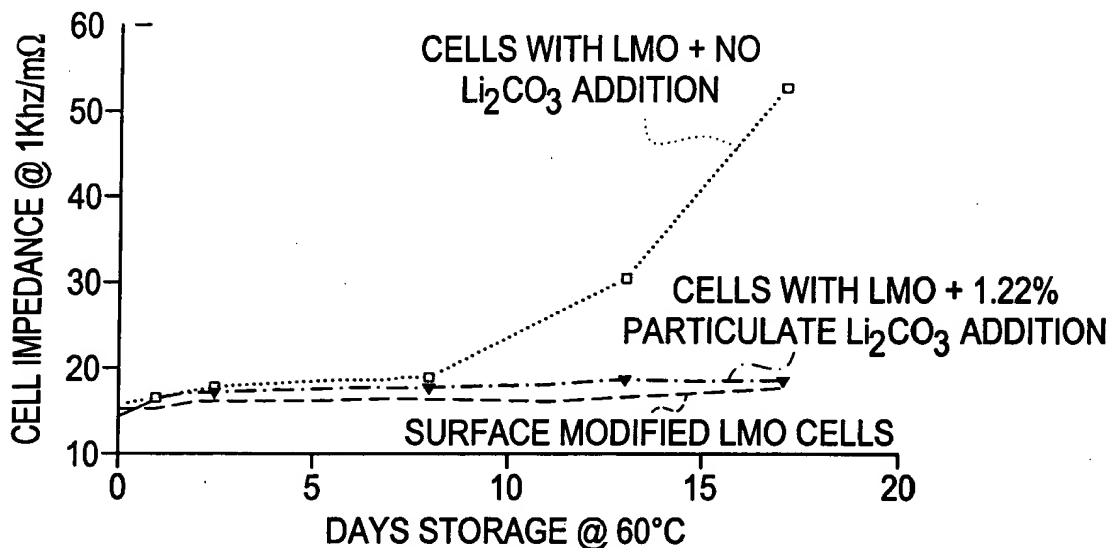
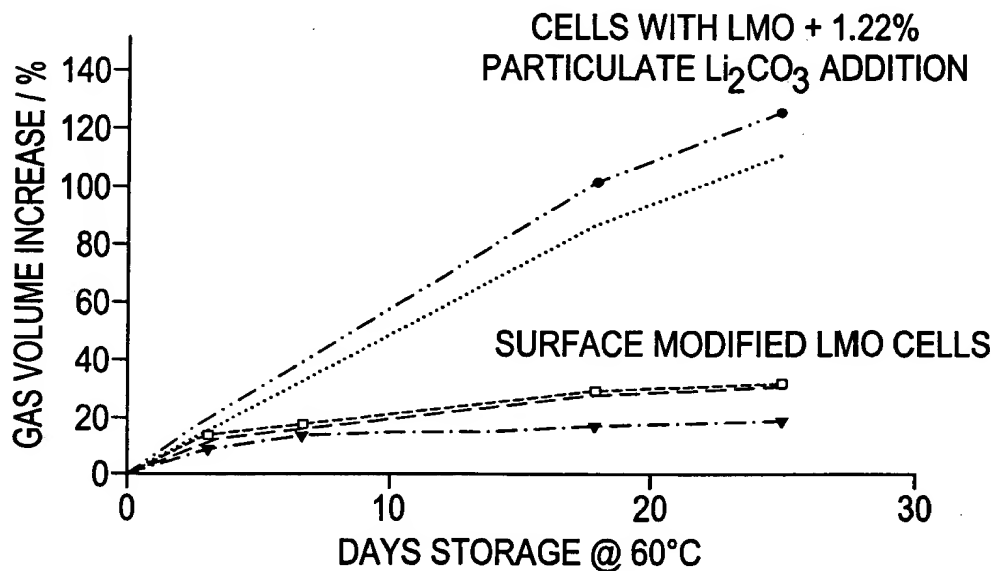


FIG. 9

GRAPHITE / LiMn_2O_4 GAS VOLUME VARIATION DURING 60°C STORAGE



8/10

FIG. 10

Mn 2p PEAKS

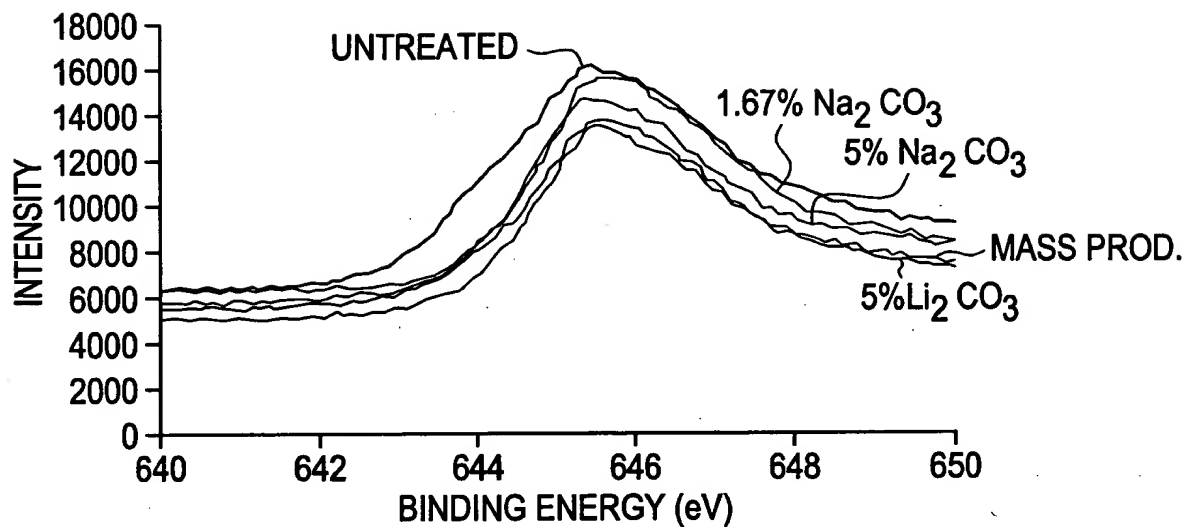
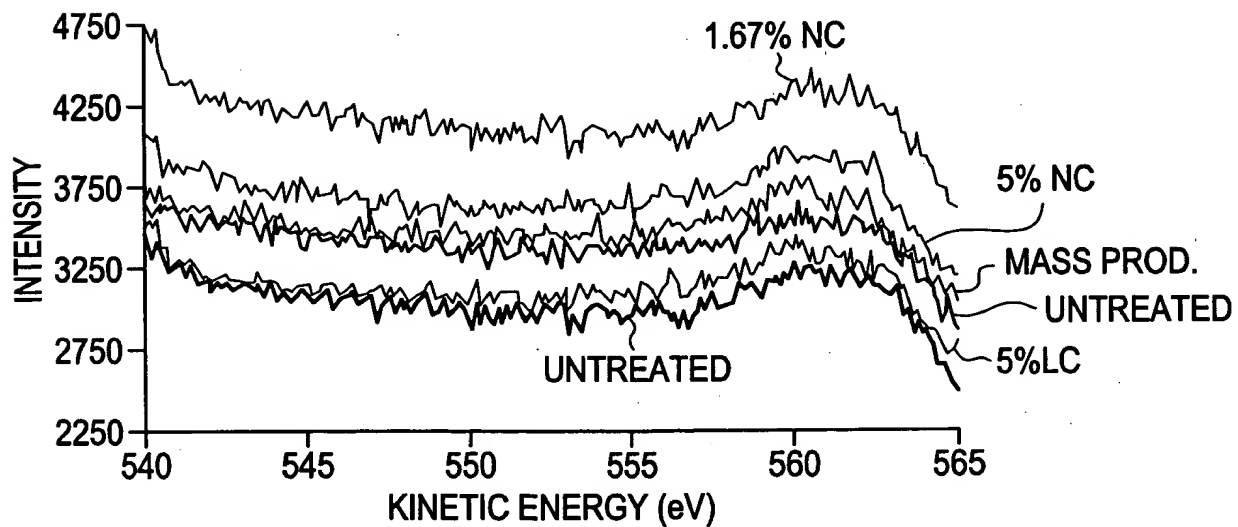


FIG. 11

Mn LMM AUGER PEAKS



9/10

FIG. 12

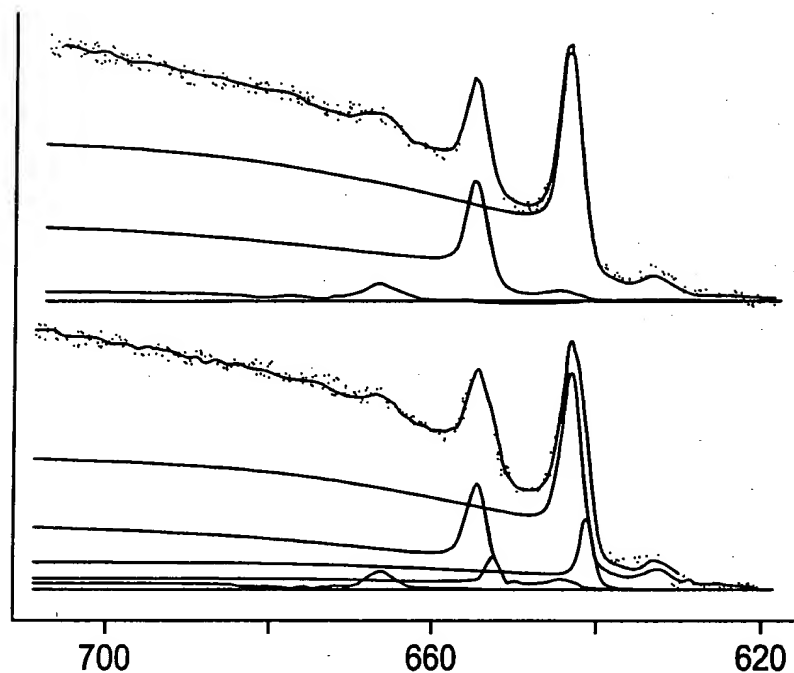
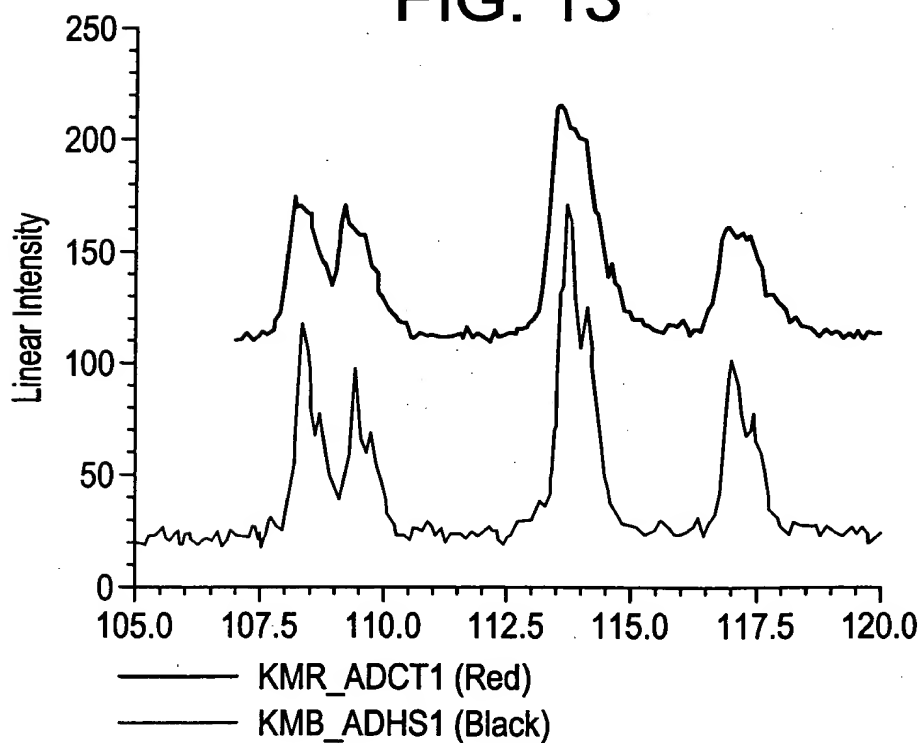


FIG. 13



10/10

FIG. 14

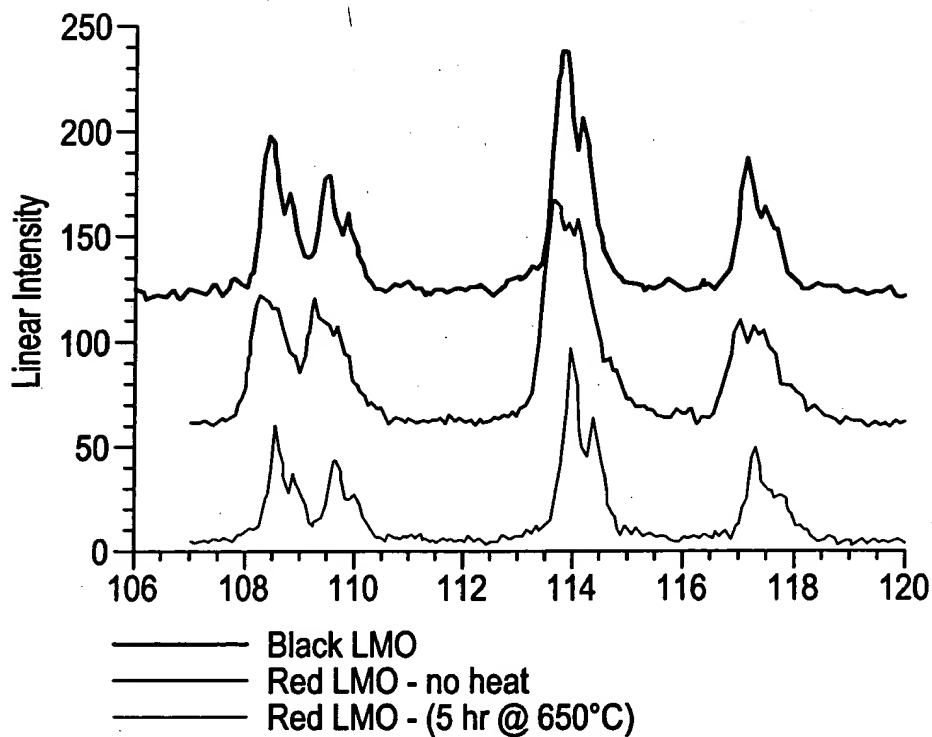


FIG. 15

